IN THE SPECIFICATION

Please amend paragraph 7 as follows:

FIG. 1 depicts the prior art arrangement of equipment in a WDM system;

Please amend paragraph 19 as follows:

FIG. 1 depicts a conventional WDM arrangement that includes equipment modules 30, 41, 42, 43, and 44. These modules are typically installed in an equipment frame, or rack, often as depicted in FIG. 1. Module 30 is an "add/drop" module that basically extracts specific, different, wavelengths that are present on an incoming fiber of a duplex fiber cable 39 connected to input port 31, and injects the very same wavelengths to result in an output WDM optical signal at output port 32 that is coupled to the second fiber in duplex fiber cable 39. More specifically, module 30 has a filter element 45 that receives an optical signal from input port 31, and develops an output. Filter element 46 receives an optical signal from the output of filter element 45, and develops an output. Filter element 47 receives an optical signal from the output of filter element 46, and develops an output. Lastly, filter element 48 receives an optical signal from the output of filter element 47, and develops an output that is applied to output port 32. Filter elements 45-48 are basically identical except that each extracts and injects an optical signal of a different wavelength. More specifically, filter element 45 effectively comprises two serially connected components, where the first

component extracts an optical signal of a specified wavelength (λ_1), and the second component inject an optical signal of the same specified wavelength. Accordingly, filter element 45 outputs an optical signal of wavelength λ_1 at port 33 and receives an optical signal at port 33. Similarly, filter element 46 outputs an optical signal of wavelength λ_2 at port 34 and receives an optical signal at port 34, filter element 47 outputs an optical signal of wavelength λ_3 at port 35 and receives an optical signal at port 35, and filter element 48 outputs an optical signal of wavelength λ_4 at port 36 and receives an optical signal at port 36. Ports 33-36 are duplex ports, and they are coupled with duplex "leads" to optical-to-electrical converter <u>modules 41-44</u> ~~modules 41-46~~, respectively. Each such converter accepts a modulated optical signal of a specified wavelength and converts the information contained therein to electronic form, as well as, conversely, modulated information unto an optical signal of the specified wavelength.

Please amend paragraph 23 as follows:

The set of wavelengths that is used for the various interconnected modules in node B ought to be identical to the set of wavelengths used in the modules of node A (unless these modules interact with other (not shown) module), if it is desired to have each module in node A exchange information with some module in node B. There is a one-to-one relationship between the modules of node A and node B. The sequence of wavelengths that is used in node B does not have to be related to the

sequence of wavelengths used in node A (the depicted sequence in modules 100, 101, 102, and 103 of node A being λ_1, λ_2, λ_3, λ_4, respectively ~~λ_3, respectively~~). Advantageously, however, some order is beneficial; and the most beneficial order is one where the sequence of wavelengths used in node B is identical to the order used in node A. This order, which results in the same loss at all wavelengths (because all wavelengths go through the same number of modules between the point where the wavelength is added and the point where the wavelength is dropped), yields what is known as a FIFO (First In – First Out) arrangement. This is the arrangement shown in FIG. 3.

Please amend paragraph 25 as follows:

FIG. 6 presents an arrangement that involves nodes A, B, and C. Nodes A and C are terminal nodes, and node B is a mid-span node. In FIG. 6 ~~FIG. 5~~, node A employs wavelengths λ_1, and λ_2, where λ_1 is used to communicate with a module in node B and λ_2 is used to communicate with a module in node C. The second module in node B communicates with the second module in node C. In accord with the principles disclosed herein, the module in node B that communicates in some wavelength with a module in node A (e.g., λ_1 in FIG. 6) precedes -- in the signal path where signals flow from node A to node B, then to node C -- the module in node B that communicates in the same wavelength with a module in node C. That means that module 131, which extracts a signal of wavelength λ_1 from the upper optical signal path where signals flow from left to right,

precedes module 132. Having first extracted the signal at wavelength λ_1, module 132 can inject a signal of the same wavelength λ_1. In the opposite direction, module 132 extracts the λ_1 signal from the lower optical path where signals flow from right to left (injected by module 141 ~~module 142~~) and once that wavelength is extracted, module 131 can inject a signal of the same wavelength λ_1. Thus, module 121 communicates with module 131, module 122 communicates with module 142 ~~module 141~~, and module 132 communicates with module 141 ~~module 142~~. The important point to note is that in an arrangement where there is a mid-span node, such as node B in FIG. 6, a wavelength can be reused. However, it is necessary to drop, or extract, that wavelength in the mid-span node before injecting data at that wavelength reuses it.

Please amend paragraph 30 as follows:

It may be noted that the FIG. 1 module, which results in the FIG. 10 interconnection when four modules are desired to be interconnected, yields an arrangement where a disruption occurs if a module needs to be replaced. Although optical modules are typically very reliable, and the replacement of a module is a task that is measured in seconds (or at least it ought to be, in light of the interconnection simplicity of modules constructed in accord with the principles disclosed herein), it must be pointed out that replacing a module does disrupt the optical signal and, consequently, for a short duration all wavelengths are lost. By separating the filters that extract (or inject) a wavelength from the optical-to-

electrical conversion means (or electrical-to-optical conversion means) and placing all of the filters of a node in a separate equipment module yields an arrangement where the conversion modules can be removed and replaced with no disruption to the system's operation except for the communication channel where the conversion module is replaced. This is illustrated in FIG. 11, where all of the filters of node A in the FIG. 3 arrangement are combined in equipment module 30, leaving four conversion modules 71-74 ~~modules 31-34~~ that, in a sense, correspond to modules 100-103 of FIG. 3.